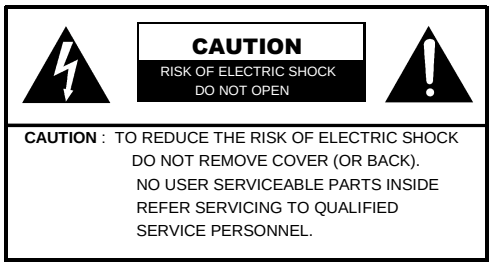
USER'S MANUAL

580 TV Line OSD Bullet Camera
With 2 External Illuminators

Please read this manual thoroughly before operation and keep it handy for further reference.

WARNING & CAUTION


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK
DO NOT REMOVE COVER (OR BACK).
NO USER SERVICEABLE PARTS INSIDE
REFER SERVICING TO QUALIFIED
SERVICE PERSONNEL.

The lighting flash with an arrowhead symbol, within an equilateral triangle is Intended to alert the user to the presence of un-insulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (serving) instructions in the literature accompanying the appliance

INFORMATION -This equipment has been tested and found to company with limits for a class a digital device Pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful Interference When the equipments operated in a commercial environment. This equipment generates, uses, and Can Radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may Cause Harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which Case the user will be required to correct the interference at his own expense.

WARNING – Change or modification not expressly approved by the manufacturer could void the user’s authority to operate the equipment

CAUTION : To prevent electric shock and risk of fire hazards.

DO NOT use power sources other than that specified.

This installation should be made by a qualified service person and should conform to all local codes.

PRECAUTIONS

- **THIS BULLET CAMERA SHOULD BE ONLY INSTALLED BY QUALIFIED PERSONNEL**
- **TO PREVENT A FIRE OR ELECTRICAL HAZARD PLEASE USE PROPER POWER CABLE**
- **THE FRONT GLASS SHOULD BE TREATED WITH CARE. DO NOT CELAN THE FRONT GLASS WITH AN ABRAISIVE CLEANING MATERIAL - PLEASE USE A SOFT CLOTH OR TISSUE TO CLEAN THE GLASS.**
- **THERE ARE NO USER-SERVICEABLE PARTS INSIDE. PLEASE DO NOT DISASSEMBLE THIS CAMERA OTHER THAN TO MAKE INITIAL ADJUSTMENTS**
- **PLEASE USE A UL APPROVED REGULATED 24 VOLT AC OR 12 VOLT DC POWER SUPPLY**
- **PLEASE USE APPROPRIATE LOW VOLTAGE POWER CABLE TO PREVENT FIRE OR ELECTRICAL SHOCK**
- **PLEASE INSURE THAT YOUR INSTALLATION AREA CAN SUPPORT THE WEIGHT OF THE CAMERA**
- **PLEASE HANDLE THIS CAMERA CAREFULLY:**
  - DON'T USE A STRONG OR ABRASIVE DETERGENT WHEN CLEANING THE CAMERA.
  - DO NOT EXPOSE THE CAMERA TO DIRECT SUN

SPECIFICATIONS

ITEM	580TVL OSD Bullet Camera
Power Source	DC 12V & AC 24v (Optional)
Image Sensor	1/3 SONY SUPER HAD II CCD, 410,000 pixels
Effective Pixels	768(H) x 494(V) (NTSC) 752(H) x 582(V) (PAL)
Maximum Aperture Ratio	1 : 1.3 ~2.0
Scanning System	2 : 1 Interlaced 525 Lines / 60 Fields / 30 Frames
Video Output	1.0V [p-p] NTSC Composite, 75Ω
Resolution	Color : 580 TV Line, B/W : 700TV Line
Lens & IR DISTANCE	DC 2.8~12mm version (60Meter) DC 5.0 ~ 50mm version (100Meter)
Back Light Compensation (BLC)	BLC / HLC / OFF
Gain Control	LOW / HIGH / OFF
Electric Shutter Speed	1/60 ~ 1/120,000 sec (NTSC), 1/50~1/100,000 sec (PAL)
SENS-UP	Built-in (selectable limit ~ X256)
WHITE BALANCE	ATW / AWC / MANUAL / INDOOR / OUTDOOR
Min. Illumination	0.05Lux (Color), 0.00002Lux (Sens up :x256), 0.00Lux (LED On)
S/N (Y signal)	52dB (Weight On)
Digital Noise Reduction (DNR)	ON / OFF (Level Adjustable)
Motion Detection	ON / OFF (8 Programmable Zones)
On Screen Display (O.S.D)	Built - in
PRIVACY Function	ON / OFF (8 Programmable Zones)
Flip & Freeze	V-REV : ON / OFF, H-REV : ON/ OFF, FREEZE : ON / OFF
DIS	ON / OFF
Digital Zoom	ON / OFF (x 10)
Operational Temperature	-29℃ ~ +50℃ (- 20℉ ~122℉)
Operational Humidity	30% ~90% RH

PACKAGE CONTENTS

- **Please make sure that the following items are included in the package:**

1 CAMERA
2 EXTRA ILLUMINATOR

ACCESSORIES:
4 MOUNTING SCREW
1 VIDEO TEST LEAD
1 WRENCH FOR CAMERA BRACKET
1 WRENCH FOR SET SCREW OF ILLUMINATOR

Please leave this manual with the end-user for future reference.

FEATURES

External Illuminators

(Easy connection way)

DC 2.8~12mm (60Meter)

DC 5.0~50mm (100Meter)

3 Axis Cable Managed Bracket

External Controller for Zoom & Focus

Easy Access for OSD Controller

FEATURES

High Resolution

Sony Super Had II 410,000K pixel CCD enable camera to achieve clear picture quality with a horizontal resolution 580TVL for color and 700TVL for B/W

True Mechanical Day/Night

The camera can show color pictures in all lighting conditions, or you can have it automatically switch to a B/W picture in low light conditions

Sens-Up

1/3"inch density CCD and digital processor permit high quality pictures to be captured in very low light condition.

HLC (Highlight Compensation)

It reverses bright spots in the picture (such as headlights), this enables the entire system to do a better job of resolving and displaying grayscale information such as a license plate.

OSD (On Screen Display)

The camera support built-in OSD with 7 different foreign languages for user friendly.

DIS (Digital Image Stabilizer)

The DIS function compensates for any camera movement to produce more stable pictures.

DNR (Digital Noise Reduction)

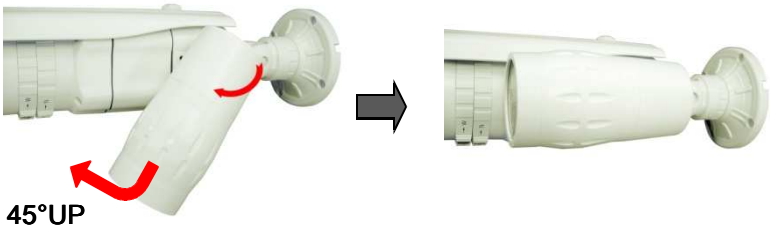
It has an assistant DSP chip that can remove image noise efficiently and it shows clean and obvious image in low luminance.

INSTALLATION

1. You can see letter ‘R’ for right side, ‘L’ for left side in the circle on these 2housings below, please correctly match right direction.

CAMERA BODY **ILLUMINATOR**

2. Please carefully connect the power pin of illuminator into the hole of the camera body and turn the illuminator 45degree upside



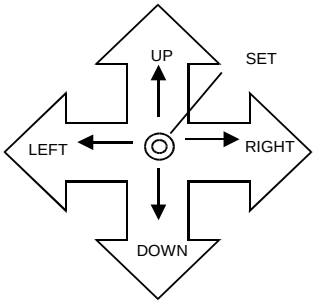
3. Fix the set screw on the Illuminator to the camera body tightly.

INSTALLATION

VIDEO TEST CONNECTOR

LED VOLUME

OSD JOYSTICK SWITCH



Push the Joy stick for one second, and the OSD appears on the screen. Move the Joy Stick up, down, left & right to control the OSD functions.

OSD MENU TREE

SETUP MENU

- LENS Option
  - DC
  - MANUAL
- EXPOSURE
  - SHUTTER
  - AGC
  - SENS-UP
  - RETURN
- WHITE BALANCE
  - ATW
  - INDOOR
  - OUTDOOR
  - AWC->SET
  - MANUAL
- BACKLIGHT
  - BLC
  - HLC
  - OFF
- DNR
  - ON
  - OFF
- DAY/NIGHT
  - COLOR
  - B/W
  - AUTO
  - EXTERN
- IMAGE ADJ.
  - FREEZE
  - V-REV
  - H-REV
  - D-ZOOM
  - SHARPNESS
  - RETURN
- SPECIAL
  - CAMTITLE
  - SYNC
  - MOTION DET
  - PRIVACY
  - DIS
  - LANGUAGE
  - RESET
  - RETURN
- EXIT

SET UP

1) LENS

Lens option should be fixed as DC iris Lens

2) EXPOSURE
<Option : SHUTTER / AGC / SENS-UP / RETURN>

Adjusts exposure settings.
SHUTTER :
FLK - Flicker-less mode (FLK) reduces on-screen flickering.
ESC - Electronic Shutter Control (AUTO) adjusts brightness level on screen.
Manual - Manual mode allows you to adjust the shutter speed from 1/60~1/120,000 of a second (NTSC), or 1/50~ 1/100,000(PAL).
AGC : Adjusts value of AGC gain. Increase the GAIN level to brighten the picture. (noise / distortion may develop)
SENS-UP : Automatically provides a clear image under low-light conditions. You can control the maximum low-light magnification from 2x to 256x (increasing magnification may cause noise/distortion). DSS is deactivated when SHUTTER is set to FLK mode.

3) WHITE BAL.
<ATW / INDOOR / OUTDOOR / AWC→SET / MANUAL>

Controls color on the screen.
ATW : Select Auto Tracking White Balance (ATW) when the color temp. is 1800℃K~10500℃K.
INDOOR : Select this when the color temp. is 4500℃K ~ 8500℃K.
OUTDOOR : Select this when the color temp. is 1800°K ~10500℃K (sodium light inclusion).
AWC→SET : Set the point the camera towards a sheet of white paper and press the SET button.
Manual : It allows you to increase or decrease the red or blue factor on Screen.

4) BACKLIGHT
<Option : BLC / HLC / OFF>

BLC : Provides light level control to overcome severe backlighting conditions.
HLC : High Light Compensation. Removing the high light and it makes possible to view the image clearly.

5) DNR
<Option : ON / OFF>

Reduces noise/distortion on the screen, Increasing the DNR level reduces noise but may introduce video artifacts.
DNR is deactivated if AGC is turned off.

6) DAY / NIGHT
<Option : COLOR / BW / AUTO / EXTERN>

COLOR : Full time color mode.
BW : Full time black and white mode.
AUTO : Not activated
EXTERN : Color in Day, B/W in Night Automatically by CDS sensor.
For Day/Night performance, Please leave as this mode.

7) IMAGE ADG.
<Option : FREEZE / V-REV / H-REV / D-ZOOM / SHARPNESS / RETURN>

FREEZE : To view still or moving pictures.
V-REV : Flip the picture vertically on the screen.
H-REV : Flip the picture horizontally on the screen.
D-ZOOM : Digital zoom of x1 ~x10.
SHARPNESS : Sharpen the image on screen.
Excessive sharpening may cause picture noise.
RETURN : Save the settings and return to the SETUP menu.

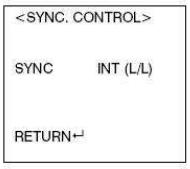
SPECIAL Menu Functions

1) CAMTITLE
<Option : OFF / ON>

Display a name and/or number on the monitor.
To add a camera title:

UP, DOWN, LEFT, RIGHT menu control = Select a character, then press (SETUP) MENU to accept it. The character is saved and the title cursor at the bottom of the screen moves to the next position.
← → = Go back or forward in the title name to make changes.
CLR = Delete the entire name and start again.
POS = Position the camera title on the screen.
Press (SETUP)MENU to confirm the position.
END = Accept the new name.

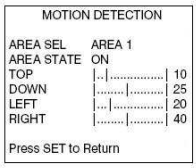
2) SYNC
<Option : INT / L/L>



INT = Synchronize the vertical interval sync pulse of your camera with other equipment to reduce the effect of picture roll on the monitor.
L/L (Line Lock) = Adjust the phase from 0°~ 359°.

INTERNAL = When line lock is not required.
LINELOCK = Adjust the vertical phase(VPH) from 000 - 359 (factory default is 0). Line line is only available with 24VAC power.
RETURN = Press MENU to return to the SETUP menu.

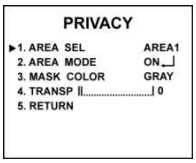
3) MOTION DET
<Option : OFF / ON>

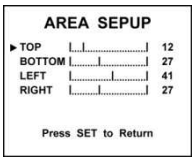


Detect moving objects on screen;
Displays MOTION DETECTED along with the number of movements counted. Select the area on screen you want to observe.

SENSITIVITY : Select 8 different Motion Detection area. When sensitivity number is high, it can recognize even small movement.
AREA MODE : Activate or deactivate the selected area.
SEL POS : Select setting point from 4 different point, Left-Top, Left-Bottom, Right-Top and Right-Bottom.
YPOS : Move setting point to vertical direction.
XPOS : Move setting point to horizontal direction.
FILL SET : Fills selected area with proper color.
RETURN : Save the settings and return to the SPECIAL menu.

4) PRIVACY
<Option : OFF / ON>





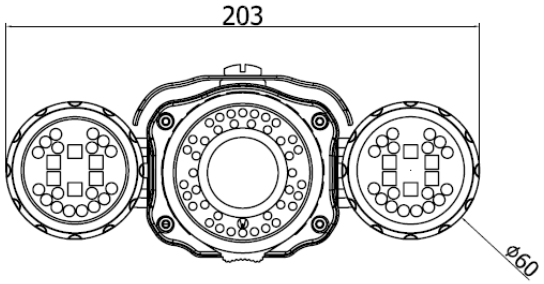
Mask up to 8 areas of the screen from video monitoring.
AREA SEL = Select up to 8 motion detection area.
AREA mode : Activate or deactivate the selected area.
MASK COLOR : Select area color.
TRANSP : Adjust the transparency of selected area.
RETURN : Save the settings and return to the SPECIAL menu.

5) DIS
<Option : OFF / ON>

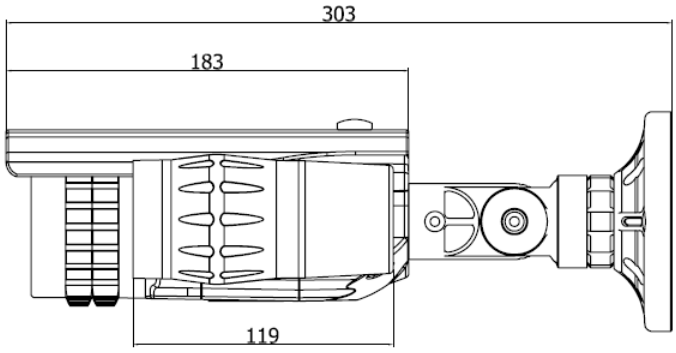
Digital Image Stabilizer. Reduce picture movement due to external factors.

DIMENSIONS

*** FRONT VIEW**



*** SIDE VIEW**



VER. 090525VR

This manual is based on the date as shown in the right and specifications are subject to change without notice for quality improvement.